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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,282	12/04/2003	Makoto Izawa	10973-112001 / K43-160313	7156
26211	7590	10/11/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			GIBSON, ERIC M	
		ART UNIT	PAPER NUMBER	
		3661		

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/728,282	IZAWA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Eric M. Gibson	3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 11 July 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1,3-6 and 9-13 is/are rejected.

7)  Claim(s) 2,7 and 8 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 18 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Okuchi et al. (US006193398B1).

a. Per claim 1, Okuchi teaches a system for automatically adjusting the optical axis direction of a vehicle headlight including identifying means for determining a change in a load state of the vehicle corresponding to at least one of a passenger or a carrying capacity, storage means for storing data indicative of an installation error of the vehicle height detecting means, and irradiation control means for obtaining the attitude of the vehicle based on an operation from vehicle height data corrected by using the data stored in the storage means and for controlling a direction of the optical axis of irradiation (column 12, line 11 – column 14, line 40).

b. Per claim 9, Okuchi teaches that the lighting unit is a headlight.

- c. Per claim 10, Okuchi teaches a rear wheel height sensor that detects a displacement of a vehicle height related to the axle (column 4, lines 56-67).
- d. Per claim 11, Okuchi teaches an EEPROM (column 12, line 13).
- e. Per claim 12, Okuchi teaches a CPU executing the control routine (column 12, lines 24-25).
- f. Per claim 13, Okuchi teaches a method for automatically adjusting the optical axis direction of a vehicle headlight including determining a change in a load state of the vehicle corresponding to at least one of a passenger or a carrying capacity, storing data indicative of an installation error of the vehicle height detecting means, and obtaining the attitude of the vehicle based on an operation from vehicle height data corrected by using the data stored in the storage means and for controlling a direction of the optical axis of irradiation (column 12, line 11 – column 14, line 40).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuchi et al. (US006193398B1).

a. Per claims 3-5, Okuchi uses a graphical prediction model to determine load state, however, one of ordinary skill in the art at the time of the invention would know and recognize that a load sensor could be substituted in place of an expression to calculate actual values, rather than predicted values.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okuchi et al. (US006193398B1) in view of Sammut et al. (US005465209A).

a. Per claim 6, Okuchi teaches the invention as explained in the rejection of claim 1. Okuchi teaches adjusting the height value based on several different factors, including weight errors and other variations (see column 12, lines 18-23), but does not explicitly teach adjusting the load state initialization by an amount of fuel in the vehicle. Sammut teaches a vehicle level control that in the process of determining vehicle height offsets the value of the load signal by an amount equal to the fuel in the vehicle (column 8, lines 1-18). It would have been obvious to one of ordinary skill in the art, at the time of invention, to adjust the load state initialization by an amount of fuel in the vehicle in the invention taught by Okuchi, in order to make sure the vehicle height calculation is accurate, as taught by Sammut and suggested by Okuchi.

*Allowable Subject Matter*

4. Claims 2, 7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
  - a. Per claim 2, the prior art does not teach or reasonably suggest in combination the present invention including wherein the reference height value changes when at least one of an operating signal in an initialization on an assembly line of the vehicle and a signal indicative of a state of power source is detected, and the vehicle height changes when the signal is not detected as claimed.
  - b. Per claim 7, the prior art does not teach or reasonably suggest in combination the present invention including wherein a reference vehicle height value obtained when an amount of fuel is a specified amount smaller than a fraction of a full amount of a fuel container is used in a first load state related to the vehicle, and a reference vehicle height value obtained when the amount of the fuel is a specified amount equal to or larger than the half of the full amount is used in a second load state related to the vehicle as claimed.
  - c. Claim 8 would serve to further define the invention of claim 7 over the prior art.

*Response to Arguments*

5. Applicant's arguments, see reply filed 7/11/2005, with respect to the rejections of claims 1, 3-6, and 9-13 under 35 U.S.C. § 103 have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new

grounds of rejection is made in view of Okuchi as explained above. Because of the new grounds of rejection, this Office Action is non-final.

***Conclusion***

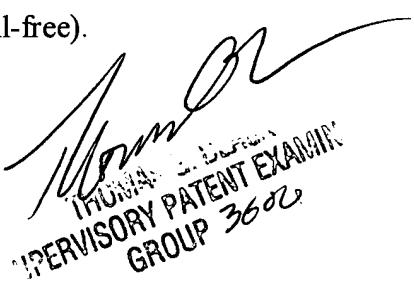
6. The references made of record and not relied upon are considered pertinent to applicant's disclosure. Kluge et al. (US005962980A) teaches a method for regulating the range of the headlights of a vehicle according to the load. Iijima (US004647069A) teaches an automotive suspension system with vehicle height control (see relevant portion at column 11, lines 55-60).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (571) 272-6960. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG



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